

(FILE 'HOME' ENTERED AT 15:32:35 ON 29 DEC 2005)

FILE 'CAPLUS' ENTERED AT 15:32:52 ON 29 DEC 2005
E PILJAC TATJANA/IN,AU

L1 6 S E3-9
E PILJAC GORAN/IN,AU
L2 53 S E3-7
L3 55 S L1 OR L2
L4 20130 S RHAMNO?
L5 6 S L3 AND L4
L6 1 S 1999:565921/AN
SELECT RN L6 1-

FILE 'REGISTRY' ENTERED AT 15:37:00 ON 29 DEC 2005
L7 2 S E1-2

FILE 'CAPLUS' ENTERED AT 15:38:35 ON 29 DEC 2005

L8 438 S RHAMNOLIPID
L9 233938 S SKIN
L10 6571 S DERMATOLOG?
L11 40046 S TOPICAL
L12 176635 S AGING
L13 10 S L8 AND (L9 OR L10 OR L11 OR L12)
L14 6 S L13 NOT L5

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:1105426 CAPLUS
 TITLE: Di-rhamnolipid from *Pseudomonas aeruginosa*
 displays differential effects on human keratinocyte
 and fibroblast cultures
 AUTHOR(S): Stipcevic, Tamara; Piljac, Tihana; Isseroff,
 Roslyn R.
 CORPORATE SOURCE: TajCo Inc., 2323 Shasta Drive 40, Davis, CA, 95616,
 USA
 SOURCE: Journal of Dermatological Science (2005), 40(2),
 141-143
 CODEN: JDSCEI; ISSN: 0923-1811
 PUBLISHER: Elsevier Ireland Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Unavailable

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:114990 CAPLUS
 DOCUMENT NUMBER: 134:157594
 TITLE: Use of rhamnolipids in wound healing,
 treatment and prevention of gum disease, and
 periodontal regeneration
 INVENTOR(S): Stipcevic, Tamara; Piljac, Tihana; Piljac,
 Jasenka; Dujmic, Tatjana; Piljac, Goran
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2001010447 | A1 | 20010215 | WO 2000-US17875 | 20000807 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2378557 | AA | 20010215 | CA 2000-2378557 | 20000807 |
| EP 1200100 | A1 | 20020502 | EP 2000-952141 | 20000807 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| US 2004224905 | A1 | 20041111 | US 2002-48923 | 20020522 |
| PRIORITY APPLN. INFO.: | | | US 1999-147265P | P 19990805 |
| | | | WO 2000-US17875 | W 20000807 |

OTHER SOURCE(S): MARPAT 134:157594
 AB Various methods are provided, including re-epithelialization and wound
 healing with reduced fibrosis, particularly for the re-epithelialization of
 mucous membrane tissues, most particularly for the treatment and
 prevention of gum disease and for periodontal regeneration, each of which
 uses administration of a composition containing one or more rhamnolipids
 as an active ingredient. The effects of topical BAC-3 [(α -L-
 rhamnopyranosyl-(1,2)- α -L- rhamnopyranosyl
)-3-hydroxydecanoyl-3-hydroxydecanoic acid] on the rate of burn wound
 closure is presented.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1999:565921 CAPLUS
 DOCUMENT NUMBER: 131:194302
 TITLE: Use of rhamnolipids in wound healing,
 treating burn shock, atherosclerosis, organ
 transplants, depression, schizophrenia and cosmetics
 INVENTOR(S): Piljac, Tatjana; Piljac, Goran
 PATENT ASSIGNEE(S): Croatia
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 9943334 | A1 | 19990902 | WO 1999-US3714 | 19990224 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2321926 | AA | 19990902 | CA 1999-2321926 | 19990224 |
| AU 9933048 | A1 | 19990915 | AU 1999-33048 | 19990224 |
| AU 747088 | B2 | 20020509 | | |
| EP 1056462 | A1 | 20001206 | EP 1999-936031 | 19990224 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI | | | | |
| JP 2002504513 | T2 | 20020212 | JP 2000-533130 | 19990224 |
| PRIORITY APPLN. INFO.: | | | US 1998-75959P | P 19980224 |
| | | | WO 1999-US3714 | W 19990224 |

OTHER SOURCE(S): MARPAT 131:194302
 AB A method for re-epithelization of skin, particularly in wound healing with reduced fibrosis, using compns. containing one or more rhamnolipids is provided. A topical composition containing rhamnolipid(s) is useful in treatment of burn shock, wounds of different origin, and the signs of aging, such as wrinkles. Oral administration of a composition containing rhamnolipid(s) is useful in treatment and prevention of atherosclerosis, prevention and treatment of organ transplant rejection, and treatment of depression and schizophrenia. E.g., burn wounds were significantly smaller in rats treated with ointment containing 0.1% (α -L- rhamnopyranosyl-(1,2)- α -L-rhamnopyranosyl)-3-hydroxydecanoyle-3-hydroxydecanoic acid (BAC-3) in eucerin as compared with burn wounds in rats receiving the vehicle alone.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:13182 CAPLUS
 DOCUMENT NUMBER: 124:106658
 TITLE: Immunological activity of rhamnolipids
 INVENTOR(S): Piljac, Goran; Piljac, Visnja
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 16 pp. Cont.-in-part of U.S. Ser. No. 866,691, abandoned.
 CODEN: USXXAM

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 5466675 | A | 19951114 | US 1994-277975 | 19940720 |
| BE 1005704 | A4 | 19931221 | BE 1992-115 | 19920204 |
| PT 630252 | T | 20050429 | PT 1993-914523 | 19930204 |
| ES 2235155 | T3 | 20050701 | ES 1993-914523 | 19930204 |
| US 5455232 | A | 19951003 | US 1994-224070 | 19940407 |
| CA 2195419 | AA | 19960201 | CA 1995-2195419 | 19950720 |
| WO 9602233 | A1 | 19960201 | WO 1995-US8787 | 19950720 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9531266 | A1 | 19960216 | AU 1995-31266 | 19950720 |
| EP 771191 | A1 | 19970507 | EP 1995-927153 | 19950720 |
| EP 771191 | B1 | 20020410 | | |

| | | | | |
|-------------------------------|----|----------|----------------|-------------|
| R: AT, CH, DE, FR, GB, LI, SE | | | | |
| JP 10502925 | T2 | 19980317 | JP 1995-505141 | 19950720 |
| AT 215827 | E | 20020415 | AT 1995-927153 | 19950720 |
| US 5514661 | A | 19960507 | US 1995-520076 | 19950828 |
| JP 2004149547 | A2 | 20040527 | JP 2004-631 | 20040105 |
| PRIORITY APPLN. INFO.: | | | BE 1992-115 | A 19920204 |
| | | | US 1992-866691 | B2 19920410 |
| | | | JP 1993-512946 | A3 19930204 |
| | | | US 1994-277975 | A 19940720 |
| | | | WO 1995-US8787 | W 19950720 |

OTHER SOURCE(S): MARPAT 124:106658

AB Methods are disclosed for treating various autoimmune diseases and for providing immunorestitution by administering an effective amount of a composition having as active ingredient ≥ 1 rhamnolipids I [R1 = H, α -L- rhamnopyranosyl; R2 = H, CH(R4)CH₂COOH; R3, R4 = (C5-20)-saturated, mono- or polyunsatd. hydrocarbyl]. Rhamnolipid II was isolated from Pseudomonas aeruginosa and characterized. Activity of II in a number of biol. tests (enzyme inhibition, effect on viruses, effect on cell DNA synthesis, lymphocyte proliferation, etc.) was determined. In a clin. trial, good results were obtained on psoriatic lesions where II was applied.

L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:582412 CAPLUS

DOCUMENT NUMBER: 121:182412

TITLE: Rhamnolipid-based surfactant compositions

INVENTOR(S): Piljac, Goran

PATENT ASSIGNEE(S): Yugoslavia

SOURCE: Belg., 20 pp.

CODEN: BEXXAL

DOCUMENT TYPE: Patent

LANGUAGE: Dutch

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| BE 1005825 | A4 | 19940208 | BE 1992-478 | 19920522 |
| PRIORITY APPLN. INFO.: | | | BE 1992-478 | 19920522 |

OTHER SOURCE(S): MARPAT 121:182412

AB The rhamnolipids have general formula I (R1 = H, α -L- rhamnopyranosyl; R2 H, CH(R4)CH₂CO₂H; R3 = C5-20-saturated or mono- or polyunsatd. alkyl; R4 = C5-20-saturated or mono- or polyunsatd. alkyl). The preferred rhamnolipid is [α -L- rhamnopyranosyl-1,2 α -L- rhamnopyranosyl]-3-hydroxydecanoyle-3-hydroxydecanoic acid. Pseudomonas aeruginosa was aerobically cultured at 32° in a medium consisting of, e.g., glucose 20, yeast extract 10, and CaCO₃ 20 g in 1 L water. The solution containing the rhamnolipids were passed through, e.g., Amberlite XAD-8, and elutriated with MeOH, dried, and purified by redissoln. and precipitation

L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:588599 CAPLUS

DOCUMENT NUMBER: 119:188599

TITLE: Pharmaceutical preparations based on rhamnolipid for treatment of dermatological diseases

INVENTOR(S): Piljac, Goran; Piljac, Visnja

PATENT ASSIGNEE(S): Innovi N.V., Belg.

SOURCE: PCT Int. Appl., 11 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| WO 9314767 | A2 | 19930805 | WO 1993-EP270 | 19930204 |
| WO 9314767 | A3 | 19930902 | | |
| W: AT, AU, BR, CA, CH, DE, ES, FI, GB, HU, JP, KR, LU, NL, NO, PL, RO, RU, SE, UA | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG | | | | |
| BE 1005704 | A4 | 19931221 | BE 1992-115 | 19920204 |
| AU 9334534 | A1 | 19930901 | AU 1993-34534 | 19930204 |

09/644,984

| | | | | |
|---|----|----------|----------------|-------------|
| EP 630252 | A1 | 19941228 | EP 1993-914523 | 19930204 |
| EP 630252 | B1 | 20041215 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 09503196 | T2 | 19970331 | JP 1993-512946 | 19930204 |
| AT 284697 | E | 20050115 | AT 1993-914523 | 19930204 |
| PT 630252 | T | 20050429 | PT 1993-914523 | 19930204 |
| ES 2235155 | T3 | 20050701 | ES 1993-914523 | 19930204 |
| US 5455232 | A | 19951003 | US 1994-224070 | 19940407 |
| JP 2004149547 | A2 | 20040527 | JP 2004-631 | 20040105 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | BE 1992-115 | A 19920204 |
| | | | US 1992-866691 | A 19920410 |
| | | | JP 1993-512946 | A3 19930204 |
| | | | WO 1993-EP270 | A 19930204 |

OTHER SOURCE(S) : MARPAT 119:188599

AB Rhammolipids, most preferably α -L- rhamnopyranosyl-(1,2)- α -L- rhamnopyranosyl-3-hydroxydecanoyl-3-hydroxydecanoic acid (I), are effective for the treatment of dermatol. diseases, e.g. papilloma virus infections. I was isolated from the culture media of Pseudomonas aeruginosa. An ointment containing 1.0% I was formulated.

L14 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:1084367 CAPLUS
 TITLE: Synthesis and properties of isocannabinoid and cholesterol derivatized rhamnosurfactants: application to liposomal targeting of keratinocytes and skin
 AUTHOR(S): Barragan-Montero, Veronique; Winum, Jean-Yves; Moles, Jean-Pierre; Juan, Emmanuelle; Clavel, Caroline; Montero, Jean-Louis
 CORPORATE SOURCE: Laboratoire de Chimie Biomoleculaire, UMR 5032, ENSCM, Universite Montpellier II, Montpellier, 34296, Fr.
 SOURCE: European Journal of Medicinal Chemistry (2005), 40(10), 1022-1029
 CODEN: EJMCA5; ISSN: 0223-5234
 PUBLISHER: Elsevier Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The usefulness of vesicles to cargo material depends on the design of new ligands able to incorporate easily inside the bilayer and also to direct the vesicles to the targeted site. Therefore, the synthesis of two new rhamnose-bearing surfactants is described. The hydrophobic part consists of cholesterol (in compound 3) and citrylidene phloroglucinol (in compound 6). The ability of these two rhammolipids to incorporate into a DPPC membrane and to form aggregates is investigated, resp., by differential scanning calorimetry and by surface tension measurements. Those two new surfactants were incorporated in fluorescent liposomes to study their interactions with keratinocytes and skin sections. Intra-liposomal delivery to keratinocytes was observed in both cases, even if the kinetics of delivery were different according to the rhamnosurfactant used. Skin sections were stained by both liposomal formulations, and different interactions between the liposomes and skin cells according to the surfactant used were noted.
 REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:16314 CAPLUS
 DOCUMENT NUMBER: 138:84929
 TITLE: Influence of rhammolipids and Triton X-100 on the desorption of pesticides from soils
 AUTHOR(S): Mata-Sandoval, Juan C.; Karns, Jeffrey; Torrents, Alba
 CORPORATE SOURCE: Environmental Engineering Program Department of Civil and Environmental Engineering, University of Maryland at College Park, College Park, MD, 20742, USA
 SOURCE: Environmental Science and Technology (2002), 36(21), 4669-4675
 CODEN: ESTHAG; ISSN: 0013-936X
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A rhammolipid biosurfactant mixture produced by *Pseudomonas aeruginosa* UG2 and the surfactant Triton X-100 were tested for their effectiveness of enhancing the desorption of trifluralin, atrazine, and coumaphos from soils. Sorption of both surfactants by the soils was significant and adequately described by the Langmuir-type isotherm. Values of maximum sorption capacity (Q_{max}) and Langmuir constant (K_{lang}) did not correlate with the amount of soil organic matter. Our results indicate that clay surfaces play an important role in the sorption of surfactants. When surfactant dosages were high enough to reach soil saturation and maintain an aqueous micellar phase, pesticide desorption was only enhanced. At dosages below soil saturation, surfactants sorbed onto soil, increasing its hydrophobicity and enhancing the sorption of the pesticides by a factor of 2. Similar values of water-soil partition coeffs. (K_{sol^*}) for aged and fresh added pesticides to soils indicate that the aging process used did not significantly alter the capability of either surfactant to desorb the pesticides. A model able to estimate equilibrium distributions of organic compds. in soil-aqueous-micellar systems was tested against exptl. results. The determined organic carbon partition coeffs., K_{oc} values, indicate that, on a carbon normalized basis, sorbed Rh-mix is a much better sorbent of pesticides than TX-100 or soil organic matter. These results have significant implications on determining the effectiveness of surfactants to aid soil remediation technologies.
 REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:832013 CAPLUS
 TITLE: Influence of Rhamnolipids and Triton X-100
 on the Desorption of Pesticides from Soils
 AUTHOR(S): Mata-Sandoval, Juan C.; Karns, Jeffrey; Torrents, Alba
 CORPORATE SOURCE: Department of Civil and Environmental Engineering,
 Environmental Engineering Program, University of
 Maryland, College Park, MD, 20742, USA
 SOURCE: Environmental Science and Technology (2002), 36(21),
 4669-4675
 CODEN: ESTHAG; ISSN: 0013-936X
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A rhamnolipid biosurfactant mixture produced by *P. aeruginosa* UG2 and the surfactant Triton X-100 were tested for their effectiveness of enhancing the desorption of trifluralin, atrazine, and coumaphos from soils. Sorption of both surfactants by the soils was significant and adequately described by the Langmuir-type isotherm. Values of maximum sorption capacity (Q_{max}) and Langmuir constant (K_{lang}) did not correlate with the amount of soil organic matter. Our results indicate that clay surfaces play an important role in the sorption of surfactants. When surfactant dosages were high enough to reach soil saturation and maintain an aqueous micellar phase, pesticide desorption was only enhanced. At dosages below soil saturation, surfactants sorbed onto soil, increasing its hydrophobicity and enhancing the sorption of the pesticides by a factor of 2. Similar values of water-soil partition coeffs. (K_{sol^*}) for aged and fresh added pesticides to soils indicate that the aging process used did not significantly alter the capability of either surfactant to desorb the pesticides. A model able to estimate equilibrium distributions of organic compds. in soil-aqueous-micellar systems was tested against exptl. results. The determined organic carbon partition coeffs., K_{oc} values, indicate that, on a carbon normalized basis, sorbed Rh-mix is a much better sorbent of pesticides than TX-100 or soil organic matter. These results have significant implications on determining the effectiveness of surfactants to aid soil remediation technologies.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:356941 CAPLUS
 DOCUMENT NUMBER: 137:205725
 TITLE: Biodegradability of aged pyrene and phenanthrene in a natural soil
 AUTHOR(S): Hwang, S.; Cutright, T. J.
 CORPORATE SOURCE: Department of Civil Engineering, University of Akron,
 Akron, OH, 44325-3905, USA
 SOURCE: Chemosphere (2002), 47(9), 891-899
 CODEN: CMSHAF; ISSN: 0045-6535
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A study was conducted to evaluate the biodegradability of pyrene (PYR) and phenanthrene (PHE) aged in a natural soil. Both the single and binary systems were either biostimulated via a nutrient amendment or bioaugmented via an inoculation of the enriched bacteria and nutrients. Aging resulted in higher concentration of both compds. and smaller bacterial activity in the solution-phase. The total biodegraded extent was greater in the aged soil system than in the freshly spiked system. As anticipated, biostimulation was not appropriate to attain an effective biodegrdn. in this study, and bioaugmentation achieved a substantial increase the total biodegrdn. extent. These findings were attributed to indigenous *Pseudomonas aeruginosa* entering a stationary-phase during the 200-day aging and producing rhamnolipid biosurfactants. A different sampling technique (i.e., after vigorous hand-shaking) revealed 15 times higher microbial population than the normal sampling from the stagnant solution. PAH bioavailability in the aged soils can be underestimated when the microbial activity is determined only from the stagnant solution. Cometabolism enhanced PYR degradation when PHE was present as a primary substrate.

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1997:564976 CAPLUS
 DOCUMENT NUMBER: 127:163484

TITLE: Use of mixtures of glycolipids and surfactants in the washing of dishes
 INVENTOR(S): Hees, Udo; Fabry, Bernd
 PATENT ASSIGNEE(S): Henkel KgaA, Germany
 SOURCE: Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|------------------|----------|
| DE 19600743 | A1 | 19970724 | DE 1996-19600743 | 19960111 |
| | | | DE 1996-19600743 | 19960111 |

PRIORITY APPLN. INFO.: AB Mixts. of glycolipids and surfactants have high synergism in the manual washing of dishes and good skin compatibility. A 40:60 mixture of rhamnose lipid and ethoxylated coco alc. sulfate (concentration 0.5 g/L) in the dishwashing test (beef tallow removal) gave a relative removal of 107% and basic foam test rating (DIN 53 902) 150 mL; vs. 93 and 130, resp., for glycolipid alone; and 93 and 95, resp., for surfactant alone.

L14 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:18773 CAPLUS
 DOCUMENT NUMBER: 112:18773
 TITLE: Antimicrobial effects of biosurfactants
 AUTHOR(S): Lang, S.; Katsiwela, Eleftheria; Wagner, F.
 CORPORATE SOURCE: Inst. Biochem. Biotechnol., Tech. Univ. Braunschweig,
 Braunschweig, D-3300, Fed. Rep. Ger.
 SOURCE: Fett Wissenschaft Technologie (1989), 91(9), 363-6
 CODEN: FWTEEG; ISSN: 0931-5985
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Various microbial glycolipids (sophorolipids, rhamnolipids, trehalose lipids, and 2 cellobiose lipid mixts. produced by *Torulopsis bombicola*, *Pseudomonas* species, *Rhodococcus erythropolis*, and *Ustilago maydis*, resp.) were tested for their inhibitory effects on the growth of bacteria or fungi frequently found in obstructed sebaceous glands of human skin (*Pseudomonas seruginosa*, *Bacillus subtilis*, *Staphylococcus epidermidis*, *Streptococcus faecium*, *Propionibacterium acnes*, *Candida albicans*, and *Glomerella cingulata*). In general, gram-pos. bacteria were more sensitive than gram-neg. species, which were only weakly or not inhibited. Sophoro- and rhamnolipids were particularly effective against gram-pos. bacteria.